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|-------------------------------|----------------------------------|---------------------|--|
| <b>Notice of Allowability</b> | <b>Application No.</b>           | <b>Applicant(s)</b> |  |
|                               | 09/899,951                       | SHIMAZAWA, KOJI     |  |
|                               | Examiner<br>Christopher R. Magee | Art Unit<br>2653    |  |

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address--*

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTO-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to 8/30/2004.

2.  The allowed claim(s) is/are 1,2,6-9,13 and 14.

3.  The drawings filed on \_\_\_\_\_ are accepted by the Examiner.

4.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)  All    b)  Some\*    c)  None    of the:

1.  Certified copies of the priority documents have been received.

2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.

(a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached  
1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.

(b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of  
Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

#### Attachment(s)

- 1.  Notice of References Cited (PTO-892)
- 2.  Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3.  Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
- 4.  Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
- 5.  Notice of Informal Patent Application (PTO-152)
- 6.  Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
- 7.  Examiner's Amendment/Comment
- 8.  Examiner's Statement of Reasons for Allowance
- 9.  Other \_\_\_\_\_.

## DETAILED ACTION

### *Response to Remarks*

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.
2. The reply filed 8/30/2004 was applied to the following effect: All relevant objections and rejections are withdrawn as being satisfied.

### *Reasons for Allowance*

3. Claims 1, 2, 6-9, 13 and 14 are allowed (renumbered as claims 1-8 respectively).

The following is an examiner's statement of reasons for allowance:

This application is for a MAGNETORESISTIVE EFFECT THIN FILM MAGNETIC HEAD.

- **Claims 1 and 8** specify a magnetoresistive effect thin film head which requires:  
*"at least a part of said insulation gap layer being made of Co- $\gamma$ Fe<sub>2</sub>O<sub>3</sub>."*

Jeffers '354 discloses using Fe<sub>3</sub>O<sub>4</sub>, which is in fact magnetite and not maghemite ( $\gamma$ Fe<sub>2</sub>O<sub>3</sub>). It is evident that Jeffers '354 incorrectly identifies magnetite (Fe<sub>3</sub>O<sub>4</sub>) as maghemite ( $\gamma$ Fe<sub>2</sub>O<sub>3</sub>). Abe et al. (US 4,477,319), which is incorporated by reference by Jeffers '354 [col. 2, line 34], teach a clear definition of magnetite (Fe<sub>3</sub>O<sub>4</sub>) and maghemite ( $\gamma$ Fe<sub>2</sub>O<sub>3</sub>) in the process for forming a ferrite film. Jeffers '354 does not teach, disclose or suggest the use of Co- $\gamma$ Fe<sub>2</sub>O<sub>3</sub> as an insulation layer as claimed in the present invention.

Therefore, these features, in combination with other features of claims 1 and 8, are not anticipated by, nor made obvious over, the closest prior art of record Jeffers (US 4,754,354).

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4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

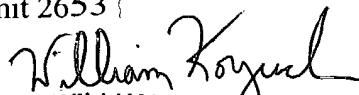
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher R. Magee whose telephone number is (703) 605-4256. The examiner can normally be reached on M-F, 8: 00 am-5: 30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (703) 305-6137. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

October 29, 2004

  
Christopher R. Magee  
Patent Examiner  
Art Unit 2653

  
WILLIAM KORZUCH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600